

## Overview

Addressing the United States' recycling infrastructure has emerged as a significant priority in recent years due to the lack of standardization across the industry and low recycling rates nationwide. The recycling process typically begins with consumers or businesses generating recyclable materials, which are subsequently gathered by either a private hauler or a government entity. The materials are then transported by the collector to a processing facility where they are sorted, cleaned, and prepared for transport to a filling facility or directly to a manufacturing facility. After the materials have been processed, recyclables are made into new products at a recycling plant or another facility.

Each year, millions of tons of recyclable materials are collected and moved across the world, with nearly 2,000 recycling facilities and tens of thousands of individuals working together to help make sure waste is properly recycled. Recycling primarily sees strong demand from industrial markets, construction activity, and steady demand from residential households. Over the years, evolving government legislation and public awareness have pushed for greater demand for recycling services and other forms of waste stream diversion – with overall waste recycling percentages hitting record highs in 2018.

Multiple states and jurisdictions began 2024 by updating their waste, recycling, and organics laws, aiming to divert more material from disposal. New organic recycling mandates, packaging laws, and changes to bottle bills that add new containers and increase deposit values are now on the books. General awareness about humanity's impact on the earth and the growing concern around climate change has increased rapidly over the last decade – now making it a hot topic across the globe. This Basic will offer a broad overview of the U.S. recycling system and explain challenges and proposed solutions to improve it.

## U.S. Recycling System

Across the United States, recycling laws have begun to grow more stringent. Currently, no national law mandates recycling, and as such, state and local governments often introduce recycling requirements in the absence of a federal framework. Sometimes states team up with non-profit organizations to implement a successful recycling program. Several U.S. states, including California, Connecticut, Delaware, Hawaii, Iowa, Maine, Massachusetts, Michigan, New York, Oregon, and Vermont have passed laws that establish deposits or refund values by encouraging reusing and recycling of beverage containers. Most states refund five cents per can or bottle, but some can refund up to 10 cents. This is known as a [Bottle bill or container deposit law](#).

While the recycling process often differs by commodity and locality, the process essentially is comprised of three main steps: collection, processing, and remanufacturing into a new product. According to the Environmental Protection Agency (EPA),

## Center Forward Basics

Center Forward brings together members of Congress, not-for profits, academic experts, trade associations, corporations and unions to find common ground. Our mission: to give centrist allies the information they need to craft common sense solutions, and provide those allies the support they need to turn those ideas into results.

In order to meet our challenges we need to put aside the partisan bickering that has gridlocked Washington and come together to find common sense solutions.

For more information, please visit [www.center-forward.org](http://www.center-forward.org)

more than 9,800 recycling systems exist across the U.S. Paper, cardboard, plastic bottles, and metal cans are widely accepted, whereas styrofoam, bubble wrap, glass bottles, and plastic bags are more widely rejected. Some recycling systems let residents put acceptable recyclable materials in one recycling bin, while others require bottles, cans, or paper to be separated, and cardboard or paper to be bundled and tied.

The current recycling and composting efforts in the U.S. have various outcomes. The U.S. is achieving substantial results with items including batteries, cardboard, and food containers, with more than 50% of the waste streams being recycled. However, when looking at the flip side, the U.S. is faring more poorly in other categories. Clothing, furniture, food waste, and small appliances have very low recycling rates. Given this current data, an opportunity exists for the U.S. to begin targeting these items and goods more specifically using education, diversion avenues, and overall adaptive reuse. Commercial entities have the greatest potential to significantly increase recycling and reduce waste. Those businesses that generate large volumes of recyclable materials may also have an opportunity to reduce the costs related to disposing of them as waste.

## Challenges and Solutions

A lack of standardization across states and counties is a major challenge in the recycling system. Most Americans want to recycle, as they believe recycling provides an opportunity for them to be responsible caretakers of the Earth. However, it can be difficult for consumers to understand what materials can be recycled, how materials can be recycled, and where to recycle different materials. This confusion often leads to placing recyclables in the trash or throwing trash in the recycling bins.

Another major challenge is contamination. Contamination often results from consumer confusion, which prevents materials from being recycled and affects other materials that cannot be processed in certain facilities. Proposed solutions include establishing national or regional standards that are uniform and scalable to help consumers, manufacturers, and waste management complete the highest rates of recycling. Enhanced communication between the manufacturers of new materials and products and the recycling industry could help them prepare for and optimally manage the recycling of new materials.

Recycling engagement boils down to the daily actions of millions of people across the country. Individuals regularly decide what will be recycled or trashed, how to prepare a product for recycling, and why it might be worth the extra effort to recycle. By comparing the current state of residential recycling with the requirements of a truly efficient system, it becomes clear where the gaps are greatest, and where policy, investment, and action could have the largest impact.

## Looking Ahead

Today, the U.S. recycling industry is pivoting more towards technology, innovations, and other methods to aid in the efficiency of the recycling process. Significant developments are occurring in waste management, recycling, and sustainability along with an increased demand for sustainability from both customers and employees. Emerging technologies are revolutionizing waste management and stricter regulations are pushing organizations and citizens to prioritize recycling and reuse practices in their operations. According to the World Economic Forum, scientists are predicting that if nothing changes in our plastic consumption habits, more plastic waste will be in the oceans than fish by 2050.

## Links to Other Resources

- Cal EPA - [Lithium-ion Car Battery Recycling Advisory Group | CalEPA](#)
- Harmony Enterprises - [Recycling Laws are Different in Every State - Harmony](#)
- Packaging Dive - [EPR, recycling refunds, labeling top 2024 packaging policy concerns](#)
- RTS - [The State of Recycling Today 2024 - Recycle Track Systems | RTS](#)

- The Recycling Partnership - [2024 State of Recycling Report](#)
- United Nations Institute for Training and Research - [GEM 2020 - E-Waste Monitor](#)
- United States EPA - [The U.S. Recycling System | US EPA](#)
- Waste Dive - [Here's where waste, recycling and organics laws changed on Jan. 1.](#)
- World Economic Forum - [The world's e-waste is a huge problem. It's also a golden opportunity](#)